ARMY DEVELOPMENTAL ASSESSMENT CENTER: A DEMONSTRATION FOR THE NOMINATIVE COMMAND SERGEANT MAJOR POSITION

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14. ABSTRACT

The 38th Chief of Staff (CSA) GEN Odierno directed the Center for Army Leadership (CAL) to provide a one-time demonstration of a developmental assessment center for strategic non-commissioned officer (NCO) positions, specifically the nominative command sergeant major (CSM) role. This tasking was prompted by findings from the 2014 National Defense Authorization Act and CSA Way Point #2 (Adaptive Army Leaders for a Complex World, CSA Strategic Priorities, JAN 14), which recommended expanding developmental assessment events to increase leader awareness of current leadership skills and abilities as measured against future leader position requirements. The outcome was a nominative CSM Leader Development Assessment Center (LDAC) that provided a rigorous and purposeful process to assess the skills of senior NCO leaders and accelerate their development for success at the strategic leader level. This report outlines the development, execution, and lessons learned LDAC as well as other potential applications within the U.S. Army.

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DESIGN AND ADMINISTRATION OF AN ARMY DEVELOPMENTAL ASSESSMENT CENTER: A DEMONSTRATION FOR THE NOMINATIVE CSM POSITION

CONTENTS

LIST OF FIGURES

LIST OF TABLES

INTRODUCTION

Impetus

The 38th Chief of Staff (CSA) GEN Odierno directed the Center for Army Leadership (CAL) to provide a one-time demonstration of a developmental assessment center for strategic non-commissioned officer (NCO) positions, specifically the nominative command sergeant major (CSM) role. This tasking was prompted by findings from the 2014 National Defense Authorization Act and CSA Way Point #2 (Adaptive Army Leaders for a Complex World, CSA Strategic Priorities, JAN 14), which recommended expanding developmental assessment events to increase leader awareness of current leadership skills and abilities as measured against future leader position requirements. The leader assessment center concept was then adopted as a part of the Army Leader Development Program (ALDP) as initiative I-13-003, Army Priority List (APL) #6R.

Assessment Center Methodology

The assessment center methodology has been widely used in the private sector to develop individuals by using a structured and objective series of assessments and exercises that measure leader skills relative to higher level roles. An assessment center is defined as a standardized evaluation of behavior based on multiple inputs. Several trained observers, referred to as assessors, and techniques are used. These trained assessors then make judgments about behavior are made from assessments and/or simulations specifically developed to fit the demands of the target role or level. These judgments are pooled in a meeting among the assessors or by a statistical integration process, which are then used for administrative purposes (e.g. selection, promotion, etc.) or developmental feedback to the participant (International Task Force on Assessment Center Guidelines, 2009).

Assessment centers were first used by the German Army in the early twentieth century. The Office of Strategic Services in the U.S. first used assessment centers in during World War II to select espionage agents (Smith, 1972). The assessment center methodology has been used by the U.S. Army for selection to Special Forces and to ranger units for decades. The commercial sector uses the assessment center method to develop individuals by using a structured and objective series of assessments and exercises that measure leader skills relative to higher-level roles. The intent is to train and select mid-level managers and senior executives. An assessment center is defined as a standardized evaluation of behavior based on multiple inputs. Several trained observers and techniques are used. Judgments about behavior are made from specifically developed assessments. These judgments are pooled in a meeting among the assessors or by following a process that integrates scores (International Task Force on Assessment Center Guidelines, 2009).

There is substantial evidence from commercial entities and the Army that increased performance and readiness follow from assessment center events (Gaugler, et. al, 1987; Engelbrecht & Fischer, 1995; Schmidt & Hunter, 1998. A leading commercial firm that specializes in development using an assessment center methodology found that senior managers who participated were twice as likely to be promoted compared to a matched sample of employees who did not participate (Byham, 2005). Participants were also more likely to be actively working their individual development plan a year after being assessed and that developmental activities improved (Byham, 2005). Byham (2005) found that using the assessment center method for selection improved participant mindsets from an entitlement mentality to a greater understanding of the importance of merit-based promotion decisions, and led to a fundamental change in how the business recruited, hired, developed, and managed its people. Meta-analytic studies of assessment centers have also produced the criterion-related validity evidence of both overall ratings as well as separate dimension ratings (Arthur, Day, McNelly, & Edens, 2003).

Overview and Purpose

The CSM Leader Development Assessment Center (LDAC) was a demonstration of the assessment center methodology. The purpose of this assessment center was to provide feedback to CSMs on their leadership capabilities for strategic NCO positions, specifically the nominative CSM role. The LDAC provided a rigorous and purposeful process to assess the skills of senior NCO leaders and accelerate their development for success at the strategic leader level. A key component of the assessment center

methodology is that it is based on input from multiple measures (i.e., simulations, tests, and interviews) in a standardized process. The integrated results of these different assessments provide an indication of what leaders are capable of doing and their potential to be successful in senior strategic roles. This LDAC demonstration was not for administrative purposes, like promotion decisions or selection for course attendance; it was only used to facilitate self-awareness and development for participating leaders.

CSMs and sergeants major (SGMs) attending the Command Sergeants Major Developmental Program (CSMDP) at the School for Command Preparation (SCP) were selected to participate in the assessment center demonstration. The LDAC activities occurred from 17-23 October 2014 and were designed not to interfere with the standard CSMDP curriculum.

LDAC Development

The development and execution of the LDAC was performed over six months. The key developers of this LDAC demonstration were CAL research psychologists holding doctoral degrees in human factors, industrial/organizational, and cognitive/social psychology. All were certified in the protection of human subjects in research and experts in the design and development of psychological assessments of work behaviors and individual differences. The LDAC development and demonstration process had five key stages, which are covered in this report (see Figure 1 for development timeline):

- Competency Model Development and Validation
- Scenario Development and Test Selection
- Training and Calibration
- LDAC Administration & Execution
- After Action Review

Figure 1: LDAC Timeline
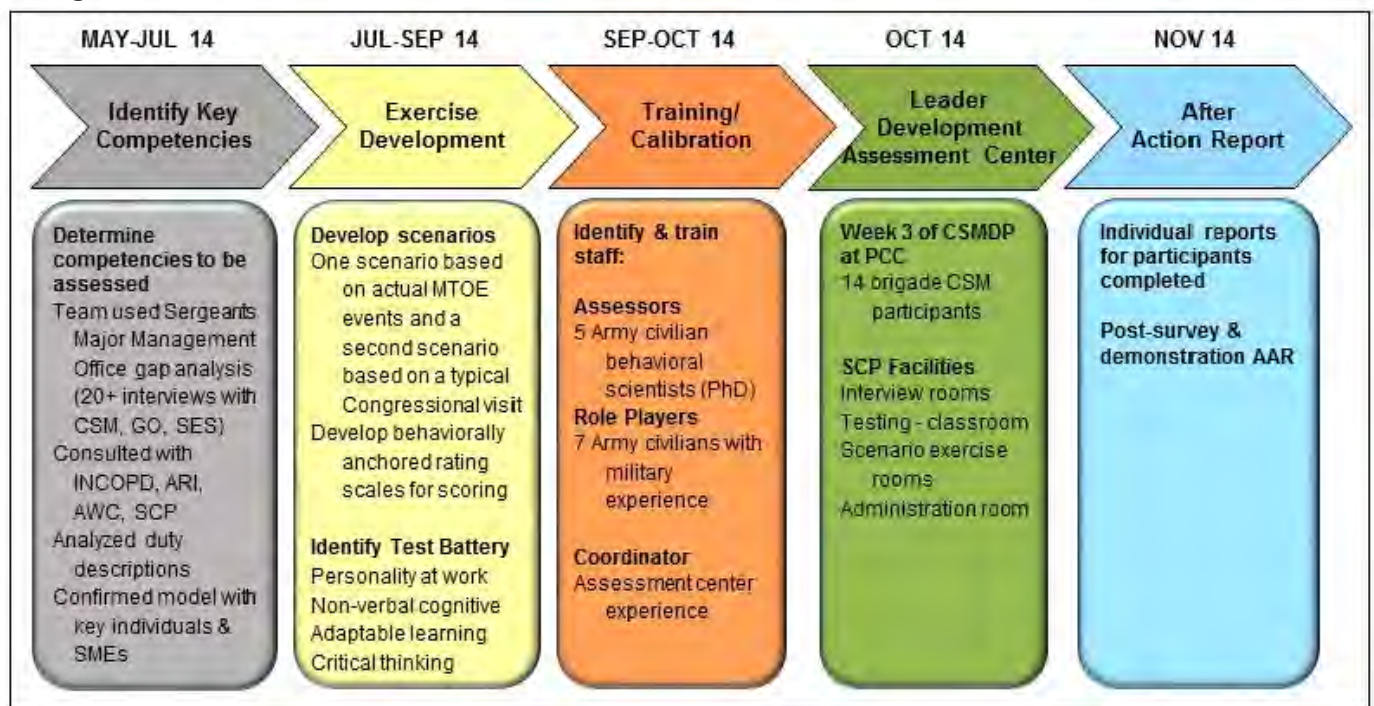
NOMINATIVE CSM COMPETENCY MODEL DEVELOPMENT

The development of the competency model used for the LDAC was led by a team of personnel psychologists from the Leadership Research, Assessment, and Doctrine Division at CAL. Personnel or industrial/organizational (I/O) psychologists have specialized education and knowledge in human behavior in work settings and in applying that knowledge to training and development, testing, performance measurement, job design, assessment, selection, and placement. The development process for the assessment center demonstration went through two key stages: initial research and review from subject matter experts (SMEs). At the core of the development process was the Army's concept of leadership as defined in ADRP 6-22 (Department of the Army, 2012). Army doctrine defines leadership activities to contain three basic goals: to lead others, to develop the organization and its individual members, and to accomplish the mission (i.e. Leads, Develops, and Achieves). These goals are extensions of the Army's strategic goal of remaining relevant and ready through effective leadership. The leadership requirements model outlines the attributes and competencies Army leaders must develop to meet these goals. The competencies and attributes outlined in ADRP 6-22 are the foundation on which the specific requirements of the nominative CSM position have been nested.

Initial Research and SME Review

The focal role of the LDAC was on the nominative CSM position, which is defined as "any authorized CSM or SGM billet where the rated CSM/SGM is rated by a General Officer (GO) or Senior Executive Agent (SES). The position must be validated on an MTOE or TDA or a provisional organization approved by HQDA." (Sergeant Major of the Army, 2011). The foundational research on the nominative CSM role came from a study conducted in 2013-14 by the Sergeants Major Management Office and the Institute for Noncommissioned Officer Professional Development (INCOPD). That research was conducted as a needs analysis to assist in curriculum development for a new nominative CSM course. The research consisted of interviews and surveys of current nominative CSMs and their respective general officers on the perceived strengths and potential skill gaps in the nominative role. The data obtained from these two sources were used to create the first draft of the competency model and behaviors to be assessed in the LDAC. They identified the key demands of the strategic, nominative CSM role. This initial model was comprised of seven competencies organized around four factors.

This initial competency model for LDAC was then reviewed by experts from the following organizations: INCOPD, the Center for Strategic Leadership and Development at the Army War College, the School for Command Preparation, and the Army Research Institute (ARI). Concurrent with this review, the model was validated by SMEs who were surveyed on the criticality of each competency as well as necessary additions or revisions to the specific behaviors. This competency model survey was sent to 17 currently serving nominative CSMs, ranging from the 1- to 3-star level, identified by the Mission Command Center of Excellence (MCCoE) headquarters. Responses were received from seven SMEs which provided both validation and revision guidance for the model. Subsequent revisions were made to the nominative CSM requirements model, which was broken down into two components, Intellect and Advising, and five key competencies (see Table 1). See Appendix A for a more detailed definition of each competency.

Table 1: Final Nominative CSM Competency Model

INTELLECT
Judgment/Decisionmaking
The capacity to assess situations shrewdly and draw sound conclusions and opinions, make sensible decisions and reliable guesses.
Strategic Level Thinking
Strategic thinking is a deliberate approach to thinking about a situation and what to do. It involves thinking broadly, deeply, and into the future. Broad—seeing/making connections across the organization and outside the Army. Deep—deeply questioning problems, their causes, opportunities to improve, and solutions. Future—shaping solutions far into the future so the organization can implement effective, lasting change. Involves thinking about the complex and dynamic factors that go well beyond the typical and familiar situations.
Cognitive Flexibility/Mental Agility
Models a flexible mindset, willing to be flexible in approach, anticipates, and scans for changing conditions, able to apply fresh, different perspectives to problems.
ADVISING
Advise/Influence
Advises the senior leaders and command teams on enlisted and noncommissioned areas. Uses appropriate methods of influence to energize others, ranging from compliance to commitment (pressure, legitimate requests, exchange, personal appeals, collaboration, rational persuasion, apprising, inspiration, participation, and relationship building).
Communication
Communicates effectively by clearly expressing ideas and actively listening to others.

Nominative CSM Behaviors

Given that the final nominative CSM competency model was to have an applied use in directing the scoring of the exercises and simulations, the model was further expanded to create behaviorally anchored rating scales (BARS) for each competency. Detailed descriptions of three effectiveness levels were created for each behavior: Opportunity for Improvement, Solid, and Strength. See Table 2 for a sample of the nominative CSM competency model BARS used in the LDAC.

Table 2: Sample LDAC Behaviorally Anchored Rating Scales

Judgment/Decisionmaking					
Behavior	**Opportunity for Improvement { — or Δ }**		**Solid { 0 or ✓ }**		**Strong / Strength { + }**
Applies the critical thinking needed to identify faulty logic and solution pitfalls.	Misses opportunities to detect inconsistencies that could lead to questionable conclusions.		Appropriately uses common sense in making judgments.		Consistently shows well-reasoned judgment that is based on appropriate logic and accurate identification of faulty reasoning.
Recognizes the need to gain additional information.	Focuses on readily available information or uses information that has minor value, when trying to understand problems or situations.		Gathers and uses the most relevant information needed to understand problems or situations.		Consistently recognizes and gathers the most relevant information needed to fully understand problems or situations.

SCENARIO AND CENTER DEVELOPMENT

LDAC Activities Overview

As stated above, a key component of the assessment center methodology is based on using multiple measures (i.e., simulations, tests, interviews, etc.) with a standardized and objective process. The integrated results of these different measures then provides an assessment of what leaders can do and their potential to be successful in senior strategic roles. LDAC activities were divided into three segments, which are described in greater detail in the following pages.

> *Segment 1: Orientation and Testing.* Personality and dispositional measures as well as cognitive ability tests were utilized to understand the leader's learning approach, work style, problem-solving skills, and interpersonal skills. Information from these tests provided insights into how the leader processed information and approached interpersonal situations.

> *Segment 2: Simulations.* The second phase began with an in-depth interview with a lead assessor and provided the opportunity to understand the participant's work experience, achievements, and skills, as well as career goals and aspirations. The assessment process continued with several work-based exercises that were designed to simulate challenges typically faced at the nominative CSM level.

> *Segment 3: Integrated Feedback.* The assessment center concluded with providing comprehensive feedback to each individual participant on all of the assessment center components (i.e. simulations, interview, and inventories). The participant's lead assessor worked with him or her to understand and prioritize this feedback in relation to current career goals and objectives. Each participant received a written report that integrated all of the information discussed in the Integrated Feedback session.

Test Selection

The LDAC utilized cognitive ability, personality, and dispositional measures, which were integrated with other data (e.g., interviews and simulation scores) from the center. A number of personality and cognitive ability tests were reviewed for potential inclusion from both within the Army as well as from external sources. Given the unique military nature of the mission and culture of the Army, emphasis was placed on finding tests that were developed within the Army or had Army-specific norm comparison groups.

The Army's Tailored Adaptive Personality Assessment System (TAPAS) was considered as a potential personality assessment. TAPAS was developed by the Army Research Institute (ARI) using Army populations (Chernyshenko, Stark, & Drasgow, 2010; Drasgow, 2012). The TAPAS was developed to assess up to 21 sub-dimensions of the Big Five personality factors and several additional personality characteristics relevant to military settings. It has been used for initial military accessions and placement (Knapp & Heffner, 2010; Nye et. al, 2012). The TAPAS has an adaptive administration method that decreases the time required from the participant and also has Army-specific norm comparison groups. Although the TAPAS has Army-specific norms, the comparison data for NCO populations were at rank levels far below the CSM rank, which would have made it difficult to draw comparisons to higher levels of leadership. Secondly, the TAPAS is primarily a research-based measure and has not yet been adapted for individual interpretation or use. At the time of the LDAC administration, ARI did not have an individual feedback report designed for participants, and given the time constraints of the LDAC project, this was not something that could be created prior to the execution of the center. Finally, the constructs assessed by the TAPAS were not well aligned with Army leadership doctrine (e.g., ADRP 6-22) nor the focal competencies and behaviors being assessed via the LDAC. For these reasons, the decision was made not to use the TAPAS for the current administration of the LDAC.

Two external and two internally developed measures of both cognitive ability and personality were selected for nominative LDAC. Cognitive ability was measured using two assessments, the Army Critical Thinking Test (ACTT) and the Ravens Standard Progressive Matrices (SPM). The ACTT was developed and validated by CAL and is a measure of critical thinking (Curnow, Parish, & Fallesen, 2008). The Ravens SPM is an abstract reasoning test that has established validity and reliability (Raven, Raven, & Court, 2000) and is widely used in the private sector for leader development initiatives (Ree & Carreta,

2002, Gonzalez, Thomas, & Vanyukov, 2005). The use of these two cognitive ability tests provided an assessment of an individual's reasoning capability and potential, as they each captured different components of general cognitive ability. Two aspects of personality and disposition were also assessed. The Deep Learning Orientation Battery (DLOB), developed by CAL, provides dispositional indicators related to the Intellect attributes (see ADRP 6-22) and assesses the individual's use of cognitive and meta-cognitive strategies. Interpersonal personality factors and work style constructs related to leadership were assessed using the Workplace Personality Inventory II (WPI-II), which has established validity and reliability and is widely used in the private sector for leader development initiatives (Pearson, 2013). Confidential individualized feedback reports on all tests were provided to CSM participants and no one else. See Appendix B for details on measures administered as a part of the LDAC.

Test Scoring Protocol

The raw percentile scores for the two externally validated tests, the WPI-II and the Raven's SPM, were transformed into a common number scale and integrated into a corresponding competency score. LDAC developers decided not to integrate the CAL-developed dispositional and cognitive ability measures (e.g. the DLOB and the ACTT), as there was insufficient validity evidence to support their integration into the overall assessment scores. A test conversion calculator was used to transform the raw percentile scores into 1-5 rating scores that could be numerically aggregated with the other LDAC exercise and simulation scores (see Appendix C for detailed description of influence test scoring). The day after completion of assessments, participants were provided reports of their results on each individual test (e.g., WPI, Raven's SPM, ACTT, DLOB) during a feedback session with their lead assessor. Each lead assessor helped the leader interpret and integrate the results with their broader feedback themes received during the LDAC.

Influence Exercise

Participants were given one hour to complete a six part influence exercise that included a variety of different questions and situational judgment tests to assess understanding of influence techniques and their application as outlined in Army leadership doctrine (ADRP 6-22). The influence exercise was drawn from three sets of materials that were developed by CAL and ARI. One set of CAL materials was developed to evaluate instruction on influence for Army leaders who were training to become foreign security force (FSF) advisors. The training material was based on instruction developed in 2008 on commitment, compliance, and resistance for FM 6-22 (Department of the Army, 2006). The other set of CAL items was selected from situational judgment tests that were developed to assess leadership competencies. The ARI material consisted of items from a self-assessment tool that used situational judgment test items and self-reflection on preferred influence strategies (Zbylut, Wisecarver, Foldes, & Schneider, 2010). All materials were screened to select items applicable to non-commissioned officers and for nominative-level CSMs. The items also assessed participant's ability to recognize and appropriately address different types of resistance in others. These items were drawn from past work by CAL and ARI on influence techniques (see Appendix C for more detail). Scores for the influence exercise were converted to a common 1 to 5 metric used in the other nominative-CSM exercises (see Appendix C for detailed description of influence test scoring). An influence exercise interpretation guide was provided to each lead assessor to assist with interpreting the influence scores and to provide guidance on how to provide verbal and written feedback to their participants on the results during the overall feedback session.

Overall Scenario Development Process

The development of the LDAC scenario, which would provide the background and story foundation for the simulations, was developed through a three-stage approach. This approach included soliciting guidance from experts within the Army currently utilizing an assessment center methodology, as well as reviews with SMEs. The key aspects of the scenario development are described in the next section and Figure 2 presents a summary of the actions within each stage.

Figure 2: Overall LDAC Scenario Development Process
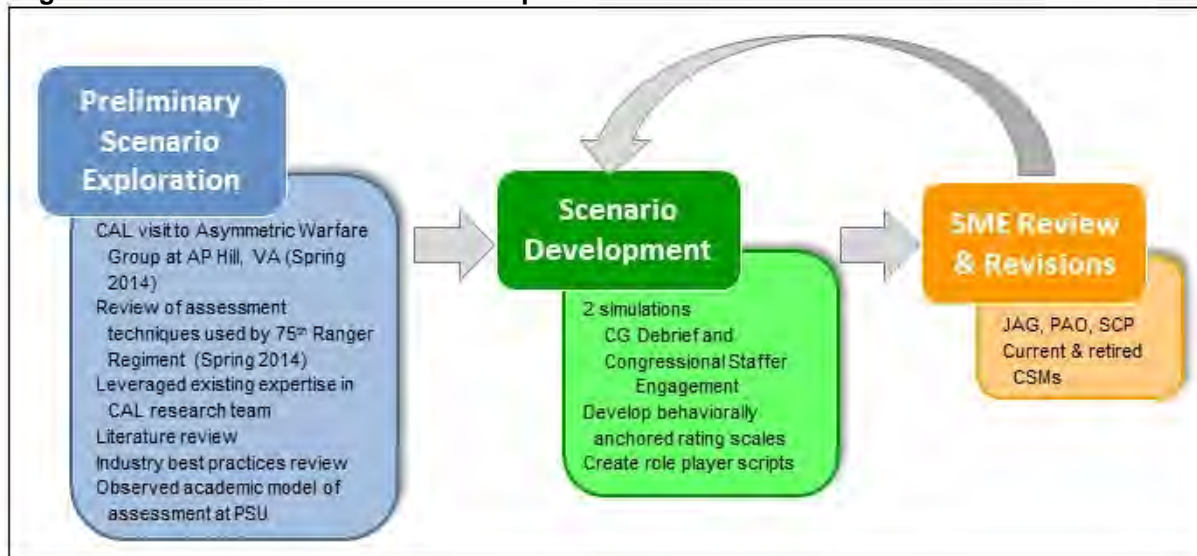
Learning from Existing Army Assessment Centers

Given that the assessment center methodology is currently in use in different segments of the Army, CAL researchers set out to gain an understanding of these administrations and their best practices. In February 2014, CAL researchers met with representatives from the 75th Ranger Regiment to learn what tests they use as part of the selection phase of their assessment center. In March 2014, CAL researchers visited the Asymmetric Warfare Group (AWG) to observe and leverage their expertise in administering assessment centers to assess and select candidates for their AWG cadre. The researchers observed a week-long set of exercises that followed standard assessment center practices. The AWG used a threaded scenario to evoke behaviors associated with specific competencies and attributes identified for operational advisors (e.g., self-confidence, temperament, perspective-taking, problem solving, conceptual capacity, and communications). Candidates were also given standardized personality inventories and cognitive ability tests, though none of these utilized Army norms. Candidates did not receive feedback on their assessment results during or after their participation. The candidates who were selected from the assessment center process would enter another phase of training and assessment. It was at that point when the leader received feedback, including results from their standardized testing. The AWG assessment center was initially developed in 2006 and relies upon a consistent and well-trained staff of role players and psychologists to provide reliable and calibrated ratings. The AWG assessment center has also been evaluated with respect to its criterion validity, or how well it predicts success of candidates in the advisor/operator role. CAL researchers obtained information on the development of the assessments, administration and operations, use of the evaluations in their boards for selecting AWG cadre, and the validation of the assessments.

Scenario and Simulations Creation

Leveraging the lessons learned from other Army assessment centers, the scenario development for LDAC centered on concepts that included multiple CSM competencies, was capable of being executed by a limited staff of role players and assessors, sufficiently detailed to serve as the foundation for simulations, and realistic enough to have face validity with participants. The key intent was to identify an overarching scenario that required individuals to synthesize large amounts of information and guidance from a GO, and then make decisions and communicate this information to others. SMEs (retired CSMs) were engaged to help identify and develop the overarching scenario, which included a multi-stage role-play simulation. As part of the scenario development, all information was provided to additional SMEs for review and recommendations. These SMEs possessed expertise with brigade command, Judge Advocate General processes and regulations, or recent forward operations. A pilot rehearsal of the scenario and simulations was then conducted with observers from CAL's team of research psychologists and observers from the School for Command Preparation. After action reviews (AARs) were then

conducted and revisions were made to both the content and the sequencing of the material. Role-play simulations required the CSM participants to quickly assimilate and integrate information, communicate the commander's intent, and exercise appropriate methods to influence key stakeholders. Participants were provided read-ahead materials prior to their arrival at the LDAC, as well as immediately prior to each simulation in order to prepare for the upcoming challenge.

LDAC Component Competency Coverage

Each activity, exercise, and test utilized in the LDAC was designed to capture a specific target factor and competency identified in the initial model development. Based upon expert understanding of the target dimensions and exercises, LDAC developers determined the competencies that should be elicited by the exercises (see Table 3).

Table 3: Exercise by Competency Mapping

	Exercises					
				Role Playing Simulations		
Competency	Testing	Influence Exercise	Structured Interview	Written Memo	CG Debrief	Congressional Staffer Interaction
Judgment/ Decisionmaking	X	X	X	X	X	X
Strategic Level Thinking	X		X	X	X	X
Cognitive Flexibility/ Mental Agility	X		X		X	X
Advise/Influence	X	X	X	X	X	X
Communication	X		X	X	X	X

Validation

The validity of the assessment center methodology relies upon content validity (the identification of dimensions that are relevant to the job in question), and construct validity (that the assessments measure what they are intended to measure). As previously stated, content validity was established through a mix of rational and empirical job modeling methods. The resulting LDAC dimensions were based on available survey research and organizational literature. Specifically, dimensions understood to be 'developable' were targeted. In this case the dimensions were distilled from three primary sources and reviewed by SMEs described in detail above.

For construct validity, assessments were chosen that had pre-existing evidence of convergent and divergent validity for the targeted dimensions, in the form of moderate to large correlations with relevant external variables. For dimensions in which no assessments were available, CAL developers created tools using best practices for assessment design. The LDAC was not intended to provide information relevant to selection or promotion as criterion validity evidence of the assessment center had not yet been established. In other words, the assessments were not selected or developed based on their ability to predict performance as a Nominative CSM. Further validation work is needed to use the specific set of assessments for the purposes of selection and/or promotion. Likewise, this demonstration did not validate the use of the LDAC as a leadership development technique, which would require data on the performance of nominative CSMs (those who attended the LDAC and those who did not). These data could be gathered in the future. However, research does indicate that participation in assessment centers can contribute to improved short-term managerial performance (Engelbrecht & Fischer, 1995) and participants are more likely to be active in working their individual development plans a year later (Byham, 2005). Assessment centers also provide realistic job previews, arguably decrease attrition, and increase job satisfaction. Multiple studies have shown the validity of assessment centers for predicting supervisor performance to range from .28 (Hermelin, Lievens, & Robertson, 2007) to .36 (Gaugler, Rosenthal, Thornton & Bentson, 1987), with some studies approaching corrected validity coefficients of .70.

STAFF TRAINING AND CALIBRATION

LDAC Demonstration Staff

The LDAC demonstration utilized a total of 14 staff taken from available and qualified manpower within CAL and MCCoE. These included five assessors, seven role players with previous military experience (two of the seven were designated substitutes if back up was needed), one report writer/editor, and one senior NCO who served as the LDAC coordinator. Two assessors also served dual roles as LDAC program director and lead administrator. To further protect the confidentiality of participants and results from unauthorized release, all LDAC staff were required to sign non-disclosure agreements with regards to who participated and what was observed. In keeping with best practices outlined by Guion (1998) assessors were behavioral psychologists who had undergone training (see below) to ensure that they understood the performance dimensions to be assessed, and were competent to produce accurate and reliable oral/written performance information. Research has provided support for the use of trained behavioral psychologists as assessors, finding their usage associated with higher validities than when managers or organizational leaders are used as assessors (Gaugler et al., 1987).

Assessor Training and Calibration

Consistent with assessment center research and best practices (International Task Force 2000; Thornton & Zorich, 1980; Thornton & Rupp, 2006), all assessors were required to attend two six-hour blocks of training and calibration in preparation for the execution phase of LDAC. During the first block of training, assessors received instruction on their dual responsibility within the LDAC, as both assessor and coach. This dual responsibility has been demonstrated as a more cognitively taxing administration method that requires more sophisticated and experienced staff (Atchley, Smith, & Hoffman, 2003). With respect to their evaluation duties, assessors were trained per best practices for behavioral observation and optimal categorization/scoring of observed stimuli (Gorman & Rentsch, 2009; Lievens, 2001; Roch & O'Sullivan, 2003; Schleicher, Day, Mayes, & Riggio, 2002; Spychalski, Quinones, Gaugler, & Pohley, 1997; Woehr, 1994). Simulation role plays during the LDAC were not video recorded due to time and resource constraints. Although recording the simulations might have been useful for training purposes in future iterations of the LDAC, research suggests that making video recordings available to assessors increases the assessment time per participant without producing a meaningful increase in accuracy (Ryan et al., 1995). Assessors were also trained on best methods for establishing an effective coaching relationship with the participant to aid in translating the feedback into realistic developmental guidance.

The second block of training focused on calibrating the assessors to the behaviors elicited in the simulations and the optimal interpretation of the BARS for each competency. Assessors watched and independently scored practice videos of both simulations. Assessors then came together as a group to discuss and calibrate score assignment.

Role Player Training

Role players were required to attend a six-hour block of training prior to the LDAC, during which they were instructed on LDAC methodology, the nominative CSM competency model, as well as responsibilities as role players. Role players were CAC Army civilians who had retired from service as field grade officers. Given resource constraints for the demonstration, role players learned to play two roles, a GO for the CG Debrief simulation and a staffer for the Congressional Staffer Engagement simulation. Role players were provided scripts for each simulation that included detailed prompts or predetermined statements. These were used consistently across all role players to ensure participants were given similar opportunities to react to simulation stimuli. Research has noted the benefits of providing detailed scripts and specific prompts for role players, which can significantly enhance the construct validity of assessment centers (Schollaert & Lievens, 2011; Schollaert & Lievens, 2012).

Role players were encouraged to play the role objectively and consistently to ensure all participants were exposed to the same character portrayal and stimuli. Role players were also trained on the use of the Role Player Observation form to record their perceptions of the participant (see scoring section below for more detail). The day-long training concluded with a guided practice session, which allowed LDAC staff to calibrate each role player to the scenario details and ensure consistent depiction of each character and role.

LDAC Administration and Execution

Schedule

Participants were contacted three weeks prior to the onsite portion of the LDAC with a brief orientation to the assessment center experience and instructions to complete the two online personality tests (WPI-II and DLOB). The main portion of the LDAC demonstration was conducted from 17-23 October 2014 in conjunction with on-going activities for the Command Sergeants Major Developmental Program (CSMDP) held at Fort Leavenworth, KS. The LDAC activities occurred either before or after instruction in CSMDP classrooms and did not interfere with the standard curriculum. The LDAC was officially launched with a kick-off working lunch briefing from the Combined Arms Center (CAC) Commanding General and CSM. Participants were then given a specific LDAC overview brief from the lead administrator, which was followed by the proctored administration of both cognitive ability tests (e.g. Ravens SPM and ACTT). Consistent with best practices research on assessment centers (Kleinmann, Kuptsch, & Koller, 1996; Kolk, Born, & van der Flier, 2003), participants were also provided with a detailed description of the nominative CSM competency model and the behaviors that would be assessed during the LDAC.

The Interview was the first and longest interactive exercise (e.g. 60 minutes) completed by participants and was led and scored by the lead assessors. The interview was followed by the Influence Exercise, which was proctored by the LDAC coordinator. Participants were then given 30 minutes to prepare for the simulations, each of which was 15 minutes in duration. The interview and all simulations were conducted in the same room for the participant (e.g. the participant's "office"). Due to schedule constraints, participants had different role players but the same assessor across both simulations (e.g. both the CG Debrief and the Congressional Staffer engagement). See Table 4 for a breakdown of time allotment for LDAC activities and Figure 3 for the flow of the simulation segment.

Table 4: Simulation Duration

Simulation/Exercise	Time Allotted	Assessor	Role Player
Interview	60 min	Each Lead	n/a
Written Influence Exercise	60 min	Scorer	n/a
CG Debrief	15 min	A	1
Written Memo	15 min	B	n/a
Congressional Staffer Engagement	15 min	A	2

Figure 3: Simulation Flow
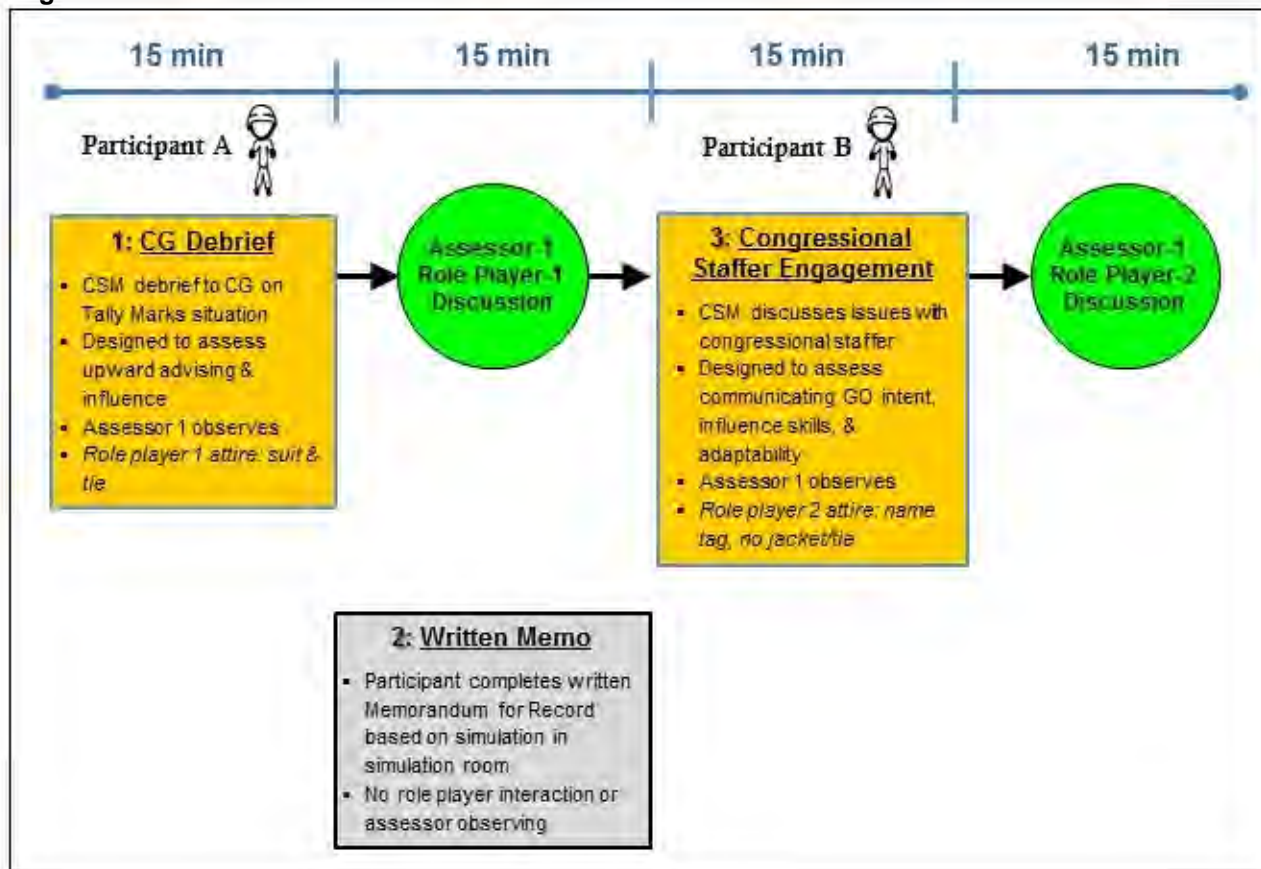
Participants were separated into three cohorts, each consisting of 4-5 participants, with staggered administration times throughout the week. Each assessor was assigned to be the lead assessor for 2-3 participants, up to one participant from each cohort (maximum 1:3 assessor to participant ratio). All cohorts completed their simulations, interviews, and exercises on the first two days of the assessment center with his or her integrated feedback with their lead assessor occurring one full day later. The total time commitment for the LDAC was roughly 6.75 hours per participant.

Simulation Scoring

As previously discussed, behaviorally anchored rating scales (BARS) were developed based on the targeted competencies for each of the four exercise assessment points (e.g. interview, CG Debrief, Congressional Staffer Engagement, and Written Memo). As per assessment center best practices, a post-exercise dimension rating method was used for each simulation, where assessors evaluated participants on each competency using a unique set of BARS that best reflected the behaviors elicited by the requirements of the exercise (e.g., Robie, Adams, Osburn, Morris, & Etchegaray, 2000; Sackett & Tuzinski, 2001). Each behavior was scored on a 5-point response scale that included three behavioral anchors (e.g., 1-needs development, 3-solid, 5-strength). During the LDAC training and calibration, assessors were instructed to evaluate participants based on the actual behaviors observed and not on perceived intentions or motivations. The simulation score sheet (see Figure 4) auto-generated the statistical average for each competency based on the ratings assigned for each behavior. The final competency score was determined based on the assessor's judgment and was rounded to the whole or half number. To enhance the quantitative rating, assessors also provided qualitative comments to describe the participant's behavior relative to each competency.

Figure 4: Sample Simulation BARS Score Sheet

Simulation: *Congressional Staffer Engagement*
Participant: John Appleseed
Assessor:

Judgment / Decision Making

Competency Model Behavior	1	2	3	4	5	Behavior SCORE	N/O
1 Engages in thoughtful assessment; demonstrates sound judgment.	Misses opportunities to sufficiently consider important factors when evaluating situations, leading to incomplete or superficial judgments.		Demonstrates thoughtful analyses and sound judgment on issues.		Consistently makes sound judgment on issues, appropriately balancing thoughtful analyses with decisiveness.		
2 Relates and compares information from different sources to identify possible cause-and-effect relationships.	Considers situations at face value, missing opportunities to look past symptoms and probe for underlying causes.		Sufficiently probes into situations to integrate information from different sources and determine possible root causes.		Probes deeply past symptoms to integrate information from different sources and determine possible root causes.		

Written Notes: *(type notes in cell below)*

Num. Avg. #DIV/0!

Score for Judgment

If behavior is "Not observed" then do not place a rating in the box

Assessors were given 30 minutes to complete the BARS scoring guide. Following the interactive simulations (e.g. CG Debrief as well as the Congressional Staffer engagement), assessors and role players also discussed the performance of the participants. Role players were encouraged to complete observation sheets to record their perception of the participant following the discussion with the assessor. This Role Player Observation Form was intended as a way to help role players organize their perceptions and capture general insights from the simulation. When completed, role player observation forms were attached to the assessor's BARS scoring guide but did not formally affect the statistical rating for each competency.

Scoring Integration

Upon completion of the exercises and simulations, all available assessment data on each participant was compiled for the respective lead assessors. The participant's file included test reports, interview score sheets, simulation score sheets, role player observation forms, and an influence exercise report. Lead assessors were also provided with an Integration Grid, which represented a statistical combination of all scores across all competencies (see Figure 5). This integration grid was the compilation of multiple ratings made by multiple assessors evaluating multiple exercises. Assessors were allotted three hours for integration where all available assessment data on the participant were integrated together to identify key themes, patterns, and behavioral triggers. Although a statistical aggregate of all ratings for each competency was provided on the integration grid, assessors were also required to make the final rating determination for each competency. Similar to the simulation score sheets, the final competency rating was on a 5-point scale (e.g., 1-needs development, 3-solid, 5-strength). For the final competency rating, a hybrid method was utilized that relied upon both quantitative and qualitative methods. This process is recommended by industry best practices when using expert assessors (Thornton & Rupp, 2006). The hybrid method was advantageous as it allowed for the benefits of both quantitative and qualitative integration methods to be utilized. A hybrid method included the benefit of having a statistical aggregation of scores, which has been supported by research with the qualitative method that has greater face validity for being objective yet also leveraging the expertise of the assessor. As the purpose of the LDAC was developmental and not administrative, no overall assessment rating was calculated. Following the integration period, assessors held a review meeting which provided those involved with the participant to discuss his/her performance and provide clarification from the BARS simulation score sheets.

Figure 5: Integration Grid

CSM LEADER DEVELOPMENT ASSESSMENT CENTER — Integration Grid

Participant: CSM Chris Gibbs
Lead Assessor: Dr. Assessor
Cohort: 2
Date: 22-Oct-14

Competencies	Opportunities to Assess						OVERALL Average	Final Average
	Testing	Interview	Influence Exercise	Written Memo	CG Debrief	Staffer Engagement		
Assessor initials		OW	LA	AK	JB	JB		OW
INTELLECT/COGNITION							2.84	3
Judgment/Decision Making	1.35	3.0	3.50	2.0	3.5	3.5	2.81	3
Strategic Level Thinking	1.51	2.5		2.0	3.5	4.0	2.70	2.5
Cognitive Flexibility/ Mental Agility	2.01	3.5			3.0	3.5	3.00	3.5
ADVISING							2.78	3
Advise/Influence	2.30	3.0	2.00	2.0	3.0	3.0	2.55	3
Communication	1.53	3.5		3.5	3.0	3.5	3.01	3.5

LEGEND

Rate
Do Not Rate
Numerical Average
Final Rating

Participant Feedback

Each participant received 1½ hours of feedback with his or her lead assessor two days after completing the simulation phase of the LDAC. The purpose of the feedback session was to provide integrated feedback about the participant's strengths and developmental areas relative to the nominative CSM role. While it may have been discussed in relation to integrated themes, the feedback did not focus on the participant's performance on one specific simulation or exercise. Rather, the behaviors exhibited during the LDAC were used to illustrate integrated themes and points, following best practices for impactful feedback (Francis-Smythe & Smith, 1997; London, 1997). Participants were also provided test reports (e.g., WPI-II, Raven's SPM, ACTT, DLOB) as well as guidance on how to interpret and incorporate them into the overall feedback. The lead assessor's role was to put the feedback in context and provide guidance for the participant on how to prioritize this feedback in relation to their own specific career goals, which for some did not include the nominative CSM position. As such, the feedback session was more interactive, with the participant playing a key role in discussing and integrating the data into their subsequent development. A layout of the feedback roughly followed the method recommended by Thornton and Rupp (2006), which included an introduction, discussion of participant goals, discussion of specific test results, discussion of integrated feedback, development, and context, and a conclusion. Given research on feedback acceptance, assessors were encouraged to focus on the developmental nature of the experience as well as on the long-term benefits of obtaining such feedback at this time in their career (Kluger & DeNisi, 1996). The importance of the assessor's role in this feedback session cannot be understated, as it has a large impact on the participant's perception of the overall experience, as well as their acceptance of the feedback itself (Bell & Arthur, 2008; Ryan, Brutus, & Greguras, 2000). Feedback acceptance has been shown to be a critical determinant in whether an individual elects to engage in developmental activities or behavioral change following a leader development initiative (Ashford, 1986; Brett & Atwater, 2001). As such, it was essential that assessors establish the appropriate environment and interaction quality with their participants during the LDAC process.

Participant Reports

Participants were sent a comprehensive written report from his or her lead assessor approximately two weeks following the completion of the LDAC. These reports provided participants their LDAC feedback in a different mode than the face-to-face session, which has been shown to increase acceptance and understanding of feedback (Brutus, 2009). As with the results from the LDAC, these reports were confidential and sent only to the participant. LDAC reports included a description of the process for which participant scores on the assessment exercises were generated and integrated together. Research has shown that providing such procedural detail on how the ratings and conclusions were generated to participants can increase feedback acceptance and perceptions of credibility (Fey, Anseel, & Wille, 2011). The reports also included a detailed description of the integrated themes discussed during the feedback session, their aggregate scores by competency, and tailored developmental suggestions. Providing detailed and behaviorally-specific results can increase individual acceptance and facilitate usage of feedback for subsequent developmental actions (Goodman & Wood, 2004). The full integration grid and individual test results were not included in the participant's report.

Data Usage and Confidentiality

Feedback reports and results from the LDAC were not part of the participant's formal evaluation process and were not shared with his or her chain of command. All results were kept strictly confidential and were not released outside of the CAL team of assessors. CAL was the only agency with access to the full set of raw data for the sole purposes of continuing development and validation efforts. In accordance with standards set forth by the American Psychological Association (2002), assessment data were not shared with any third parties external to CAL and internal access was limited to individuals who were appropriately qualified to conduct psychological research with documented training and experience in interpreting test data (e.g. licensed or advanced degree in psychology). All LDAC staff and role players were required to sign non-disclosure agreements with regards to their participation and what they observed. Assessment data are maintained securely by CAL for future follow-up with participants. The necessary firewalls and online safeguards were also established to protect the online portions of the LDAC and response data from unauthorized access.

LDAC FINDINGS

Participant Experience

The LDAC provided participants with a structured and objective assessment of their capabilities and potential to be successful in higher-level strategic Army roles. Participants received feedback and worked individually with assessors to enhance their leadership capabilities, and to increase their self-awareness and confidence. Participants had the opportunity to provide their personal reactions to the developmental experience upon completion of all LDAC activities. A follow-up survey developed by CAL researchers consisted of 29 items and was sent to all participants the week following the LDAC. Eleven of the fourteen participants responded (78% response rate). Overall, participants expressed satisfaction with the developmental experience and thought the time with the lead assessor was valuable for their development. When reflecting on the LDAC experience, one participant stated, "*This is the best counseling I have received in 27 years of service. Our NCO corps needs this type of evaluation. I want my General Officers to have confidence in their CSMs.*" A summary of the post survey results is shown below in Figure 6.

### Figure 6: Summary Post-LDAC Survey Results
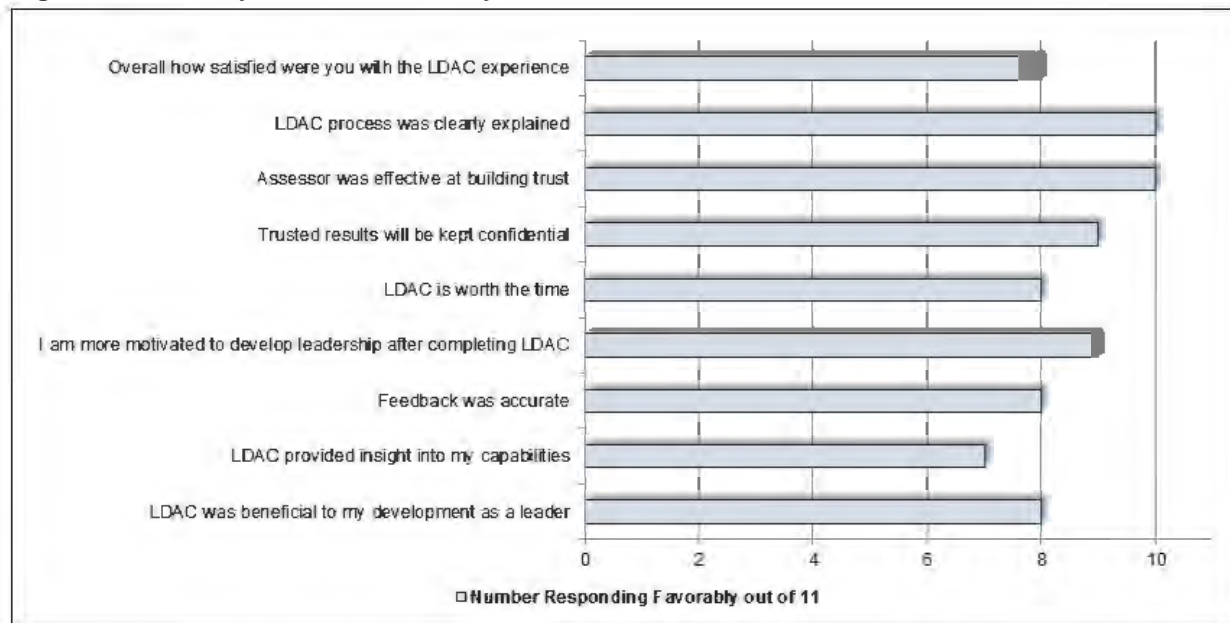
In order to assess the longer-term impact of the LDAC experience on development, participants were contacted by their lead assessor six months following the close of the LDAC. A structured set of questions was developed, and participants were given the option of discussing the questions via phone with their lead assessor or providing their written responses. Follow-up responses were received from six participants. Consistent with the feedback received immediately following the LDAC, participants valued the insight and interaction gained from working with the assessor and the unbiased approach to assessing their skills. One participant responded, "*I appreciated the assessor's candor and clarity of explanations at the feedback meeting. Given the fact that the assessor "did not know me from Adam," I considered his feedback as unbiased and, as such, valuable to my self-development.*" Overall, participants who responded also stated they had been motivated following the LDAC to spend time working on their development as a leader, on weaknesses identified during the LDAC process, or ensuring others who they supervise or mentor are more informed and involved in their development process. Given the developmental nature of the LDAC, no performance-related data were collected as a part of the follow-up survey, though this kind of information would be necessary for validation of the LDAC if it is to be used for future administrations.

Return on Investment

The development, validation, and administration of the LDAC demonstration required a significant amount of resources and time from CAL and other organizations. As can be seen in Figure 7, the largest contributing source for development and administration was the team of CAL research psychologists. One of the most challenging tasks was determining how to calculate the return on the time and resources invested in the LDAC demonstration. While the LDAC resulted in increased self-awareness and motivation for the majority of participants, the exact value of participation in terms of increase in performance or other measureable outcomes of interest for the unit or the Army are unknown. No performance data were captured on participants after the assessments. It is even more difficult to directly attribute any post-LDAC increases or decreases in performance of participant to the assessment center experience because the demonstration did not use a control or comparison group.

Figure 7: Summary of Time Required for LDAC Demonstration
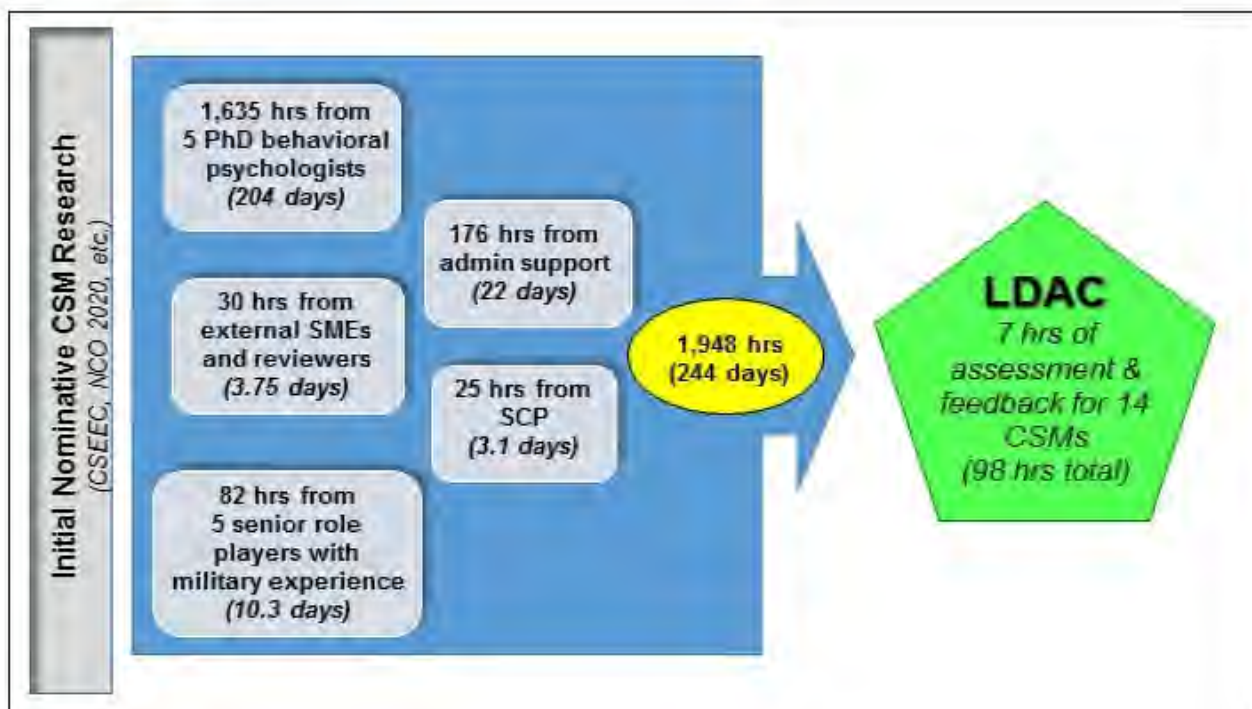
Lessons Learned

Upon the completion of LDAC activities, staff, role players, and assessors met for an in-depth after-action review on the development and administration of the demonstration. The most significant feedback from role-players was that they found value in the training and appreciated the organization of the LDAC. They also highlighted that their prior military experience was very useful and helped them better deal with the less well-defined parts of the simulation. However, a key recommendation for future iterations was to use a dedicated and trained cadre of professional role players rather than relying on available manpower within the organization. Assessors recommended having additional time for scoring the simulations and having different assessors evaluate different simulations. Moreover, assessors highlighted the need for cognitive ability and personality tests that were developed and normed using an Army population. Participant results on the WPI-II specifically were strangely distributed and inconsistent with the characteristics of the participating CSMs. One possible explanation for this could be the design of the WPI-II, which included a four-point forced choice agreement scale and item wordings that may not have been suited for the Army audience. The key concern among assessors was that the six month lead time was too short to allow for a thorough and sufficient developmental process. A better timeline would have included multiple iterations and validations of the scenario and simulations prior to execution. Moreover, no additional staff or funding was provided to CAL to aid in or offset the development time

required of the LDAC. Due to these resource and time constraints, it was not possible to consistently apply industry standards and best practices related to developing and conducting an assessment center. A summary of the LDAC demonstration functional lines as compared to industry best practices is listed in Table 5.

Table 5: Best Practice & LDAC Comparison

Function	Industry Best Practice	Army Demonstration
Competency Modeling	Competency model development based on an in depth understanding and iterative process to identify key aspects that differentiate participants.	Training needs analysis for CSEEC allowed rapid start to competency model; no performance data demonstrating differentiation among individuals on the competencies.
Assessors	Trained behavioral psychologists, multiple practice opportunities.	✔ - same as best practice.
Lead Assessor	Responsible for monitoring center oversight and administration, ensuring quality control. Has limited assessment duties.	One assessor had dual administration and assessment responsibilities.
Psychometrician	Trained testing specialist, dedicated to scoring exercises, administering tests, managing tests.	Assessors and support team filled in for a dedicated psychometrician.
Center Administrator	Dedicated resource responsible for managing the execution and coordination of center	✔ - same as best practice.
Role players	Use consistent cadre of professional role players with senior level experience with the assessed cohort. At least one dedicated role player per simulation.	Due to scheduling constraints, used available role players with prior military experience but no prior formal role-play experience. Role players learned/executed 2 roles rather than just 1.
Testing	Use cognitive ability and personality tests that have been validated to assessed cohort populations and have cohort-specific norms	Lack of available Army-validated measures; forced use of private sector validated tests.
Schedule	Scheduling dedicated to operation of assessment, exercises conducted during normal work hours.	Exercises scheduled around gaps in CSMDP schedule resulting in suboptimal times.
Participant Contact time	Three or more simulations with in-depth feedback that occurs over 10+ hours over span of several days.	Major phases (e.g. testing, simulations and feedback) took 7 hours over 3 ½ days, all exercises on same day.
Coaching	Participants receive developmental support following the integrated feedback with their lead assessor.	Participants received a report summarizing their feedback, lead assessor advised on developmental support if known.
Facilities	Dedicated facilities tailored to exercise scenario.	Used available SCP classrooms without any embellishment, which decreased authenticity of scenario.
Participant Selection	Individuals self-select or are nominated for participation, ensuring personal buy-in.	Inconsistent motivation amongst participants, some of whom were not interested in nom-CSM
Per Participant cost	Assessment centers with a greater volume of participants would have a lower per-participant cost as upfront development costs would be distributed across a larger number. Some standard operating costs (e.g. role players, facilities, etc.) would still apply.	Roughly $8,500-$11,500 per participant for current assessment center demonstration, plus additional opportunity costs.
Validation & Continuous Improvement	Structured mechanism for validating tests and results of assessment center and conducting continuous improvement to practices	Expert review of part of the demonstration (competency model, selected tests, exercises) and participant feedback after
ROI/ ROE Determination	Value estimates should be determined prior to decisions for assessment center.	Demonstration contributed positive information for estimating cost and participant acceptance, but no follow-up performance data.

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Appendix A
Final Nominative CSM Competency Model

INTELLECT/COGNITION

JUDGMENT/DECISIONMAKING: The capacity to assess situations shrewdly and draw sound conclusions and opinions, make sensible decisions and reliable guesses.

- Engages in thoughtful assessment, demonstrates sound judgment.
- Relates and compares information from different sources to identify possible cause-and-effect relationships.
- Applies critical thinking to identify faulty logic and solution pitfalls.
- Recognizes the need to gain additional information.
- Identifies and solves problems related to organizational and strategic goals.
- Identifies critical issues to use as a guide in making decisions and taking advantage of opportunities.
- Confidently makes decisions in the absence of all of the facts.

STRATEGIC-LEVEL THINKING: Strategic thinking is a deliberate approach to thinking about a situation and what to do. It involves thinking broadly, deeply and into the future: Broad—seeing/making connections across the organization and outside the Army. Deep—deeply questioning problems, their causes, opportunities to improve, and solutions. Future—shaping solutions far into the future so the organization can implement effective, lasting change. Involves thinking about the complex and dynamic factors that go well beyond the typical and familiar situations.

- Sees problems from a broad perspective.
- Sees organizations and what they address in a connected, systems approach.
- Shifts from short-term action and problem solving to identifying what it takes for long-term success.
- Focuses on understanding differently and/or deeply to create meaning from a complex situation.
- Considers the unintended consequences of actual and possible actions.
- Identifies high-risk possibilities under rare combinations of events.
- Applies expert-level knowledge (tactical, technical, joint, social, cultural, geopolitical) to derive key insights or create new solutions.
- Has a comprehensive, whole government (or system) view that takes into account competing demands of diverse stakeholders (e.g. inter-service issues, joint staff, external, civilian, congressional, etc.).
- Considers impact of external factors, world political situations, US political climates, etc., when making recommendations.

COGNITIVE FLEXIBILITY/MENTAL AGILITY: Models a flexible mindset, willing to be flexible in approach, anticipates and scans for changing conditions, able to apply fresh, different perspectives to problems.

- Demonstrates willingness to consider alternative perspectives to resolve difficult problems.
- Tendency to anticipate or adapt to uncertain or changing situations.
- Recognizes when standard operating procedures will not produce optimal results.
- Adjusts previous plans to deal with a changing situation. Engages in multiple approaches when assessing situations, generating courses of action, and evaluating them.
- Thinks through outcomes when current decisions or actions are not producing desired effects.
- Keen ability to learn with a corresponding mindset that learning is important and highly valued that inquisitiveness leads to greater knowledge and that learning from mistakes is acceptable and encouraged.
- Displays comfort working in complex situations with no preset rules and no known outcomes.

ADVISING

ADVISE/INFLUENCE: Advises the senior leaders and command teams on enlisted and noncommissioned areas. Uses appropriate methods of influence to energize others, ranging from compliance to commitment (pressure, legitimate requests, exchange, personal appeals, collaboration, rational persuasion, apprising, inspiration, participation, and relationship building).

- Influences beyond his or her direct line of authority and beyond chains of command to include unified action partners. In these situations, uses indirect means of influence: diplomacy, negotiation, mediation, arbitration, partnering, conflict resolution, consensus building, and coordination.
- Understands sphere, means and limits of influence in boundary spanning contexts.
- Outside Army boundaries, strategic leaders have a role as integrator, alliance builder, negotiator, and arbitrator.
- Identifies individual and group interests.
- Establishes internal and external networks to achieve strategic goals. Proactive in creating relationships.
- Demonstrates effective us of indirect influence techniques (diplomacy, negotiation, mediation, arbitration, partnering, conflict resolution, consensus building, and coordination).
- Establishes trust to extend influence outside the chain of command. Proactively builds and maintains alliances to benefit the organization.
- Is effective in dealing with officers, civilians, congressional members, and the press.
- Advises leaders on the cultural considerations for planning and executing missions.
- Motivates, inspires, and influences others to take initiative, work toward a common purpose, accomplish critical tasks, and achieve organizational objectives.
- Provides purpose, motivation, and inspiration to guide others toward mission accomplishment; ensures subordinates understand and accept direction; empowers and delegates.
- Enforces standards, reinforces the importance of standards, recognizes when standards are being met and addresses appropriately.

COMMUNICATION: Communicates effectively by clearly expressing ideas and actively listening to others.

- Informs others of key information.
- Demonstrates proficient interaction with others, demonstrates good interpersonal awareness and effectively adjusts behaviors when interacting with others.
- Understands others.
- Understands and effectively communicates vision, intent, and strategy with internal and external audiences. Communicates commander's intent and talking points to the press.
- Uses verbal and nonverbal means to maintain listener interest. Adjusts information-sharing strategy based on operational conditions. Ensures information dissemination to all levels in a timely manner. Avoids miscommunication through verifying a shared understanding.
- States goals to energize others to adopt and act on them.
- Uses logic and relevant facts in dialogue; expresses well-organized ideas.
- Determines, recognizes, and resolves misunderstandings.

Appendix B

LDAC Cognitive Ability & Personality/Dispositional Tests

COGNITIVE ABILITY TESTS

	Description	Administration	Factors
Raven's Standard Progressive Matrices	Nonverbal assessment tool designed to measure an individual's ability to perceive and think clearly, make meaning out of confusion, and formulate new concepts when faced with novel information.	28 items, 40 min timed Proctored during LDAC <u>Norm</u>: General Population	Abstract reasoning, fluid intelligence
Army Critical Thinking Test	Designed to assess critical thinking, the "the volitional use of reasoning and integration skills, in response to new information or a new context, to form a conclusion that will guide one's behavior, knowledge, expertise, and/or emotion."	28 items (MC & short answer) 40 min timed Proctored during LDAC <u>Norm</u>: n/a	Analysis Inference Conjecture Integration

DISPOSITIONAL & PERSONALITY TESTS

	Description	Administration	Factors
Workplace Personality Inventory	Designed to measure sixteen work styles or work-related personality traits that are important to job success in a wide range of occupations. Originally developed based on the work styles model developed by the US Dept of Labor for Occupational Information Network (O*NET®). Feedback report included an interpretive and development guide for participants.	192 items 4-pt Likert agreement scale Unproctored, completed prior to LDAC <u>Norm</u>: General Labor	Achievement – *achievement/effort, persistence, initiative* Social influence – *leadership orientation, social orientation* Interpersonal – *cooperation, concern for others* Self-adjustment – *self-control, stress tolerance, adaptability/flexibility* Conscientiousness – *dependability, attention to detail, rule following* Practical intelligence – *innovation, analytical thinking, independence*
Deep Learning Orientation Battery	Self-report assessment designed to measure individual learning/meta-cognitive strategies and tendencies to engage in deep learning. Deep learning occurs when the learner relates new concepts to existing experience, distinguishes between new ideas and existing knowledge, and evaluates and determines key themes and concepts. Because the material is learned at a deeper level, it is more likely to be retained. Additionally, learners are better able to apply the information in a changing context, relate new information to the real world, and reinterpret knowledge in the face of change. The deep learning process involves both learning and monitoring strategies. Deep learning can enhance leader's adaptability, meaning that they will be better able to deal with changing requirements.	44 items 5-pt Likert agreement scale Unproctored, completed prior to LDAC <u>Norm</u>: n/a	Mastery Orientation Performance Orientation Elaborative Processing Need for closure

Appendix C

Influence Test

The Influence Test for the LDAC was developed from four tests developed for separate purposes, by different developers, and at different times. The resulting hybrid test has six parts from the four original tests. Leaders influence others toward a goal by getting their compliance or commitment. Influence is getting people to think or do like what the influencer wants them to. Compliance is influence operating based on conforming to a requirement or a demand, while commitment is influence that operates on creating a willing dedication to a requirement or cause. Compliance is appropriate for short-term, immediate requirements and when the target of influence is unfamiliar with the task. Commitment produces longer lasting effects and good will or trust. Resistance is when the target of influence objects to adopting what the influencer wants. (For more information see ADRP 6-22, paras. 6-1–6-4.)

Understanding Influence

Part 1. Understanding instances of the categories will help military leaders be better at understanding and applying influence and better at overcoming resistance.

Part 2. Distinguishing between different types of influence techniques will help military leaders understand better understand what they are and how to use them. (See ADRP 6-22, paras. 6-5 – 6-14.]

Part 3. Knowing when the influence techniques will be most effective will help leaders pick the best technique for the right situation.

Part 4. Three vignettes are given for the leader to review and identify a) the resistance that was present, b) considerations in determining influence, and c) selection of a good influence technique. The 3 vignettes were scored against a rubric created with the assistance of the SME trainers for the FSF training. For each question, scorers assigned between 1-8 points, with 1-4 representing an ineffective level of performance and 5-8 representing an effective level of performance.

Situation Judgment Test (CAL developed leadership test)

Part 5. The Situational Judgment Test (SJT) items were selected from three pools of items from 3 versions of the CAL SJT tests for field grade officer, company grade officer, and NCO. The items were revised for the LDAC CSM assessments to be relevant to senior NCOs. The situations and response options were developed and tested to distinguish a leader's performance along effectiveness on the Army's leadership competencies. Consensus scoring among practitioners was used to identify the most effective and least effective responses. Scores on individual items are based on the consensus rank ordering of most and least effective options. An item score is the average percentage of the least and most effective selection. An overall average is provided for the 7 SJT items used in this assessment. 72-100 Army leaders participated in a content validation, 4 of the 7 items have comparison values as follows.

> NC93—leads others: Most 50.0%, Least 53.0%, Avg 51.5%
> CG4—communicates: Most 50.0%, Least 53.0%, Avg 51.5%
> FG57—leads others/extends influence: Most 32.0%, Least 66.0%, Avg 49.0%
> FG8—gets results: Most 60.4%, Least 54.2%, Avg 57.3%

Applying Influence Strategies

Part 6. This part of the activity is part of an ARI-developed self-reflection exercise. Participants receive a score that indicates how likely they said they would perform various influence tactics in six scenarios. The six were selected based on how well they could be revised to apply to senior NCOs. A participant's Likert-type likelihood answers are combined to reflect a likelihood total for each of 12 measured influence tactics (similar to the ADRP 6-22 techniques, but not exact). The explanation of the techniques used by ARI is provided on the following page. The likelihood of using the 3 strongest commitment strategies or the 3 strongest compliance strategies is also shown on the score sheet.

Scoring Procedure

Parts 1 through 3, representing a knowledge-level test on influence, were scored using a key of correct answers. There were a total of 32 items across these three parts. A score of 0 to 32 was possible for Parts 1 through 3. Eighty-six leaders who had been administered the test in 2009 scored an average of 25 out of 32 points.

Part 4 with the short answer format used a content rubric that granted points for correct inclusion and assessment of information. The rubric awarded from 1 (most ineffective) to 8 (most effective) points for each question. Scoring was done by a subject matter expert who had sample answers and scores from a previous administration to train on before scoring. The vignettes on part 4 could have a final score of 3 to 24 for each vignette.

Part 5 was scored comparing the two answers (most and least effective) to a consensus score based on expert opinion and sample data. Each set of response options was compared to a rank ordering. For example if a participant picked response 'C' to be the best answer for situation 1, the participant obtained 7 out of 8 possible points because response 'C' was actually the second best answer. Points were combined for best and least effective actions and then averaged across the seven situations. The best possible raw score was 14, the worst possible raw score was 2.08. A spreadsheet with a look-up table of answers and calculations was used as a scoring aid. A final percentage score from 0% to 100% correct was assigned to Part 5 of the influence exercise.

Part 6 was scored by summing the likelihood rating that the participant gave each influence tactic presented for each vignette. Influence techniques were not equally represented across the vignettes, some were represented two times and others represented up to five times across the six vignettes. A spreadsheet was used to calculate the score.

Scores for the influence exercise were converted to a 1 to 5 metric common to the other exercises in the nominative-CSM assessment center (see Appendix C for detailed description of influence test scoring). Similar to the protocol for the cognitive and non-cognitive assessments, participants received a score ranging from 1 to 5 on Parts 1 through 3, Part 4 and Part 5. Transformed scores were based on equal division of the range of scores. Parts 1, 2, 3 (the knowledge test), and two of the Part 4 vignettes were combined to represent the advise and influence competency. The third vignette of Part 4 and the situational judgment test (Part 5) were combined to represent the judgment and decisionmaking competency. Part 6 represented style of influence, and results were reserved for use as qualitative feedback.

Influence Tactic	Description
Appeal to Duty and/or Morality	Involves making appeals to the counterpart's conscience and desire to do the right thing. For example, the leader might tell a counterpart that taking an action is their duty or moral obligation. This tactic may sometimes use guilt as a motivator, but also may rely on a counterpart's desire to follow norms and social conventions.
Inspirational Appeal	Inspirational appeal is a tactic in which the leader attempts to motivate a counterpart to take action by appealing to an individual's values, ideals, and aspirations. In this instance, the leader is attempting to persuade the counterpart to take action out of a higher calling. While appealing to one's sense of duty may activate the motivation to avoid guilt or to comply with social norms currently in place, an inspirational appeal attempts to persuade a counterpart by generating enthusiasm for something selfless and noble
Rational Persuasion	The leader uses logic and facts to explain to a counterpart why a course of action should be adopted
Collaboration *(not assessed)*	The leader offers to provide assistance, resources, or other forms of leader-counterpart partnership to entice the counterpart to behave or act in a certain way. Collaboration can be a useful strategy for leader because it gives a counterpart ownership over the course of action and potentially can mitigate a counterpart's concerns about responsibility and limited resources.
Establishing Rapport & Creating Positive Feelings	When a leader focuses on building rapport, creating goodwill with a counterpart, or communicating an understanding of the counterpart's point of view before making a request, the leader is using rapport building as an influence strategy. In FM 6-22, this influence technique is referred to as relationship building.
Use Rank or Authority	When a leader exercises the power of authority associated with his or her rank or position, the leader is using rank and authority as a means for persuading others. In FM 6-22, this strategy is referred to as making a legitimate request.
Use Pressure, Threats, or Warnings	When a leader demands that a counterpart adopt a course of action and strongly emphasizes that negative consequences will result if the counterpart fails to take that course of action, the leader is using pressure tactics. Pressure tactics may take the form of an overt threat, such as removing advisor support, or may be more subtle, such as providing a warning that something bad will happen in the future as a result of failing to adopt the advisor's course of action
Coalition Tactics	When a leader uses the involvement or support of others to persuade a counterpart to comply with a request, then the leader is using coalition tactics. It should be noted that the leader might bring his or her "coalition" to a meeting or the leader may merely say that other people are "on board" with the advisor's point of view
Use Negative Emotion	When a leader demonstrates a negative emotion such as anger, fear, or sadness to persuade a counterpart to adopt a course of action, the leader is using negative emotions as an influence tactic. Using negative emotions can sometimes be used as a form of intimidation. For example, anger may be used to amplify the use of pressure and threats. In other instances, negative emotion may be used to match the mood of the counterpart to build rapport and camaraderie. Sometimes negative emotion may simply be used to convey information about the importance of the situation and the necessity to take action
Apprising Tactics *(not assessed)*	When a leader explains how compliance will personally benefit his or her counterpart, the leader is apprising the counterpart of the positive benefits of taking a course of action (e.g., taking action will help to develop one's expertise). Unlike exchange tactics, the resulting personal benefits to the counterpart are outside the control of the advisor
Exchange Tactics	When a leader offers something of value in exchange for compliance with the request, the leader is using some form of exchange to persuade the counterpart to take action. Unlike apprising tactics, exchange tactics focus on the exchange of rewards or positive benefits that are within the control of the advisor
Personal Appeal	When an leader attempts to persuade a counterpart by appealing to the counterpart's sense of friendship or loyalty, the leader is making a personal appeal
Use an Indirect Approach	A leader is using an indirect approach by hinting to the counterpart or using other indirect suggestions to take action
Pair Requests Strategically	The social psychology literature indicates that individuals can use successive requests in a way that makes compliance more likely. One well known strategic pairing is called the foot-in-the-door principle. In this principle, the leader might make a small request to make the counterpart comfortable with compliance. The leader may follow up with successively greater requests until the advisor's overall objective is achieved